Protocol for Notification and Work Group Functions for Evaluating Potential and Active Air Pollutant Watch List (APWL) Areas

February 2012

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Executive Summary

House Bill 1981, passed by the 82nd Regular Session of the Texas Legislature, requires the Texas Commission on Environmental Quality (TCEQ) to establish and maintain an Air Pollutant Watch List (APWL). The TCEQ establishes APWL areas statewide to ensure that ambient concentrations of air toxics are protective of human health and welfare. The APWL process helps focus investigations, permitting, and monitoring resources on specific areas where ambient air monitoring has indicated a potential health concern. This process has evolved from an internal list of facilities identified as probable emissions sources of concern based on monitoring data, to its current form, which provides information to the public and legislators. Through collaborative efforts between TCEQ regional staff, internal, and external stakeholders, levels of air pollutants have been successfully reduced below those of potential health concern in several APWL areas.

Organized intra-agency involvement is necessary in order for the APWL to become a more comprehensive process that will more effectively engage internal and external stakeholders and consistently address areas and pollutants of concern. To meet this need, a procedural work group was convened from February to June 2010 to draft the APWL protocol. The TCEQ accepted public comments on the protocol from November 23, 2010, to January 24, 2011, and finalized it in February 2012.

The APWL protocol provides both the framework and guidance necessary to make the APWL effective. The protocol identifies experts within the TCEQ's program areas to utilize their expertise in pollutant- and area-specific work groups. The protocol also provides guidance on the steps the APWL Coordinator and participating program areas of the TCEQ should take when listing, delisting, and addressing levels of concern in APWL areas and creating the three supplemental documents that are essential to each APWL area (the boundary document, strategic action plan, and communications strategy). Finally, the protocol also provides guidance on the division of responsibilities across the TCEQ, ensuring timely progress in achieving short- and long-term goals, and consistency across TCEQ-initiated activities to reduce ambient concentrations of pollutants of concern.

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Introduction

Background

The TCEQ monitors and evaluates ambient concentrations of air toxics, which are pollutants known or suspected to cause cancer or other serious health effects. The TCEQ obtains data on approximately 150 air toxics from over 80 stationary monitoring sites[1] and also from the deployment of mobile monitoring projects. The TCEQ monitors for volatile organic compounds (such as benzene), carbonyls (such as formaldehyde), polycyclic aromatic hydrocarbons (such as naphthalene), metals (such as nickel), and total reduced sulfur compounds (which include hydrogen sulfide). The TCEQ Toxicology Division (TD) evaluates air toxics monitoring data to determine the potential for air contaminants to cause short- and long-term health effects and odors. The TCEQ established ambient state regulatory standards for two air toxics—sulfur dioxide and hydrogen sulfide. For all other monitored air toxics,[2] the TCEQ establishes pollutant-specific air quality guideline levels known as Air Monitoring Comparison Values (AMCVs) to protect human health and welfare.[3] The TCEQ establishes APWL areas where ambient monitoring indicates persistent concentrations above state standards or AMCVs.

The APWL is an evolving process, the intention of which is to focus TCEQ resources on areas where monitored ambient air concentrations of pollutant(s) have been determined to be at levels of potential concern to human health (i.e., monitored ambient air concentrations have persistently exceeded state standards or AMCVs). The APWL originally began as an internal program in which the TD and the Air Permits Division (APD) maintained a list of facilities that had been identified as having the potential to contribute to elevated concentrations of one or more air pollutants, based on ambient air monitoring data. Once on the list, a facility received greater scrutiny from the APD during the permitting review process. At the October 10, 2006, Commissioners' Work Session, the Commission officially broadened the purpose of the APWL to include notification to other divisions of the TCEQ in an effort to focus investigations, monitoring, pollution prevention activities, and permitting resources. The Commissioners approved the implementation of the 30-day public comment period on proposed additions or removals of facilities or areas to or from the APWL. They also

[1] The location of stationary monitors and air toxics measured at each monitor are available on the TCEQ's Air Monitoring Site Information Map.

[2] The TCEQ does not use the APWL to attain the National Ambient Air Quality Standards (NAAQS) established by the U.S. Environmental Protection Agency for the criteria pollutants. Each state must develop a State Implementation Plan, or SIP, to demonstrate how it will attain and maintain the NAAQS. Information about the Texas SIP is available on the TCEQ website.

[3] More information on the difference between AMCVs and ESLs may be obtained on the TCEQ's website.

approved providing information about changes to the APWL to subscribers of the APWL email group.[4]

This document elaborates on the APWL process, detailing how areas become listed and delisted, and identifying practices that have been effective in improving air quality. Neither this document nor the process detailed herein are intended to limit the TCEQ's ability to address APWL areas, but rather the APWL protocol is intended to build on those elements that have been successful in the past. The TCEQ provided an opportunity for public comment on the APWL protocol. The TCEQ encourages members of the public, the regulated community, and other stakeholders to submit any future suggestions on improving the APWL protocol or suggestions regarding the listing or delisting of an area or pollutant to the APWL Coordinator at APWL@tceq.texas.gov. The TCEQ will provide an opportunity for public comment on any significant changes to this document.

Vision and Mission of the APWL

Organized intra-agency involvement is needed to improve the APWL process and more effectively engage internal and external stakeholders while consistently addressing areas and pollutant(s) of concern.

The vision for the future of this program is:

- To reduce ambient air toxic concentrations below the applicable levels of concern in APWL areas as quickly as possible.
- To identify potential contributing sources in specific APWL areas.
- To develop strategic actions to obtain timely and effective emission reductions from identified contributing sources.
- To provide mechanisms for involving TCEQ programs and stakeholders in the APWL process.

To achieve this vision, the TCEQ will create pollutant- and site-specific work groups of experts from divisions across the TCEQ (the Work Groups). These Work Groups will implement strategic action plans to improve air quality for each of the existing and future APWL areas and effectuate communication strategies to inform, engage, and coordinate efforts with affected external stakeholders. The TCEQ has identified a full-time position, an APWL Coordinator, who acts as the key contact and point person for enacting this mission. The APWL Coordinator leads each Work Group and is responsible for updating and maintaining all documents created by the Work Group, ensuring timely progress in achieving short- and long-term goals, and ensuring consistency across TCEQ-initiated activities. The APWL Coordinator represents the Work Group in meetings with internal and external stakeholders. The APWL Coordinator is also responsible for facilitating internal and external APWL briefings as

[4] Interested persons may go online and join the TCEQ APWL email group by checking the box for Air Pollutant Watch List under the Air Quality heading.

necessary and is the official liaison between the TD, other divisions of the TCEQ, the Work Group, the Chief Engineer, and external stakeholders.

The intra-agency APWL protocol is intended to provide general guidance on the steps the APWL Coordinator and participating program areas of the TCEQ will take when listing, delisting, and addressing levels of concern in APWL areas. The TCEQ will follow the steps provided in the protocol and will also assess each situation to facilitate achieving timely and effective emission reductions. The annotated flow chart in this protocol outlines the APWL process, including notification procedures and Work Group functions.

This protocol was created by an intra-agency procedural work group, which included representatives from the program areas identified below. Because of the numerous divisions, experts, and initiatives involved in executing a successful strategic action plan, the APWL could have agency-wide implications on daily program activities, as indicated in Appendix 2, *Program-Specific Procedures*. The APWL Coordinator will meet with appropriate TCEQ Deputy Directors, Area Directors, and Division Directors annually or as often as necessary to evaluate the effectiveness of the APWL protocol and its ancillary documents.

APWL Work Groups

Work Groups are assembled for each potential and active APWL area. Specifically, TCEQ program areas that have expertise relating to the unique processes believed to be contributing to elevated concentrations of pollutant(s) of concern are asked to provide a representative for each Work Group. These program areas are either directly involved with permitting of potentially contributing facilities, the collection and assessment of ambient air monitoring data, the health effects evaluation of the monitoring data, or other technical support to the team:[5]

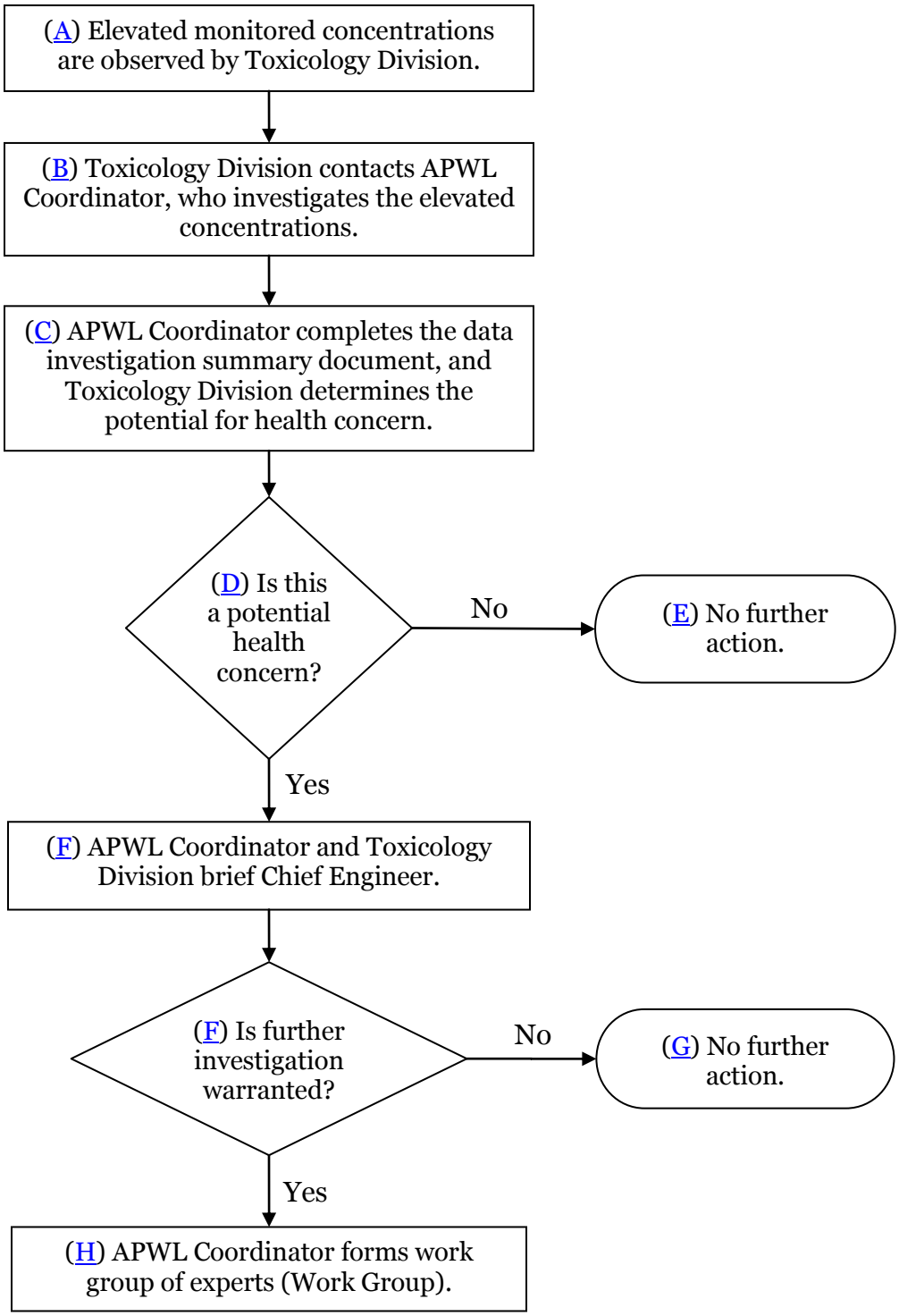
- Chief Engineer's Office (CEO)
  - APWL Coordinator – organizes, oversees, and coordinates TCEQ-initiated investigations and/or activities in current or potential APWL areas. The APWL Coordinator also serves as a liaison for the TCEQ in coordination with external stakeholders, TCEQ offices, legislators, and the regulated community. The APWL Coordinator compiles, updates, maintains, and distributes all documents created in relation to current or potential APWL areas.
  - TD – evaluates ambient air quality data from a human health and welfare perspective and determines whether concentrations of pollutants indicate a potential for adverse health effects. The TD also reviews air quality

[5] Specific Work Group functional roles of these participants are outlined in Appendix 3, *Functional Roles in Work Groups*. Representatives from each of these program areas communicate with the APWL Coordinator regarding any necessary changes to the APWL protocol or Work Group procedures.

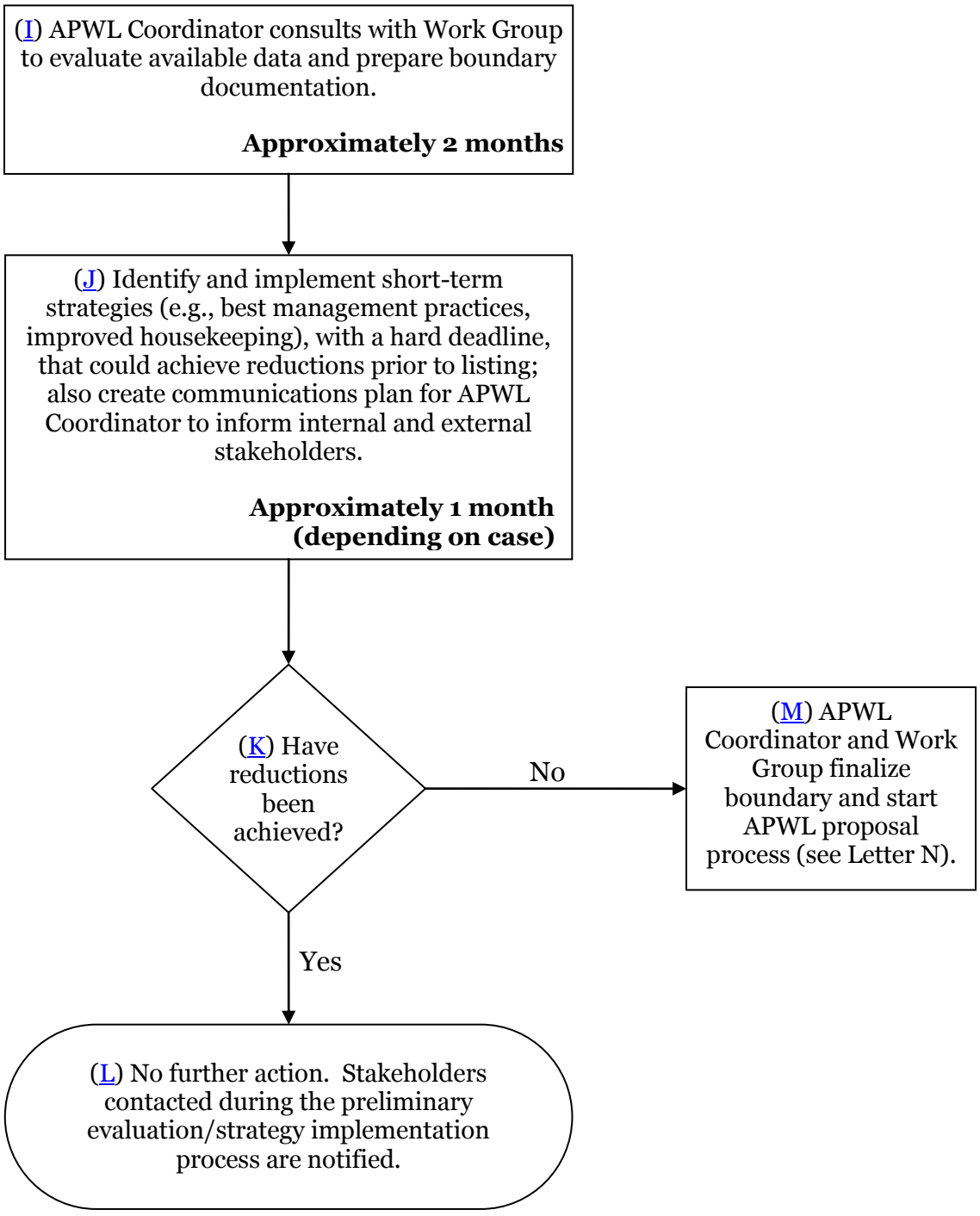
permits and modeling data with an emphasis on protecting human health and welfare.
    - Air Quality Division –
        - Air Modeling and Data Analysis (AMDA) Section – evaluates ambient air quality data to understand the nature of emission sources; findings from this can confirm, add to, or identify data gaps, such as unreported or under-reported emissions.
        - Emissions Assessment Section (EAS) – identifies magnitude and location of potential emissions sources for a pollutant or group of pollutants in an APWL area using reported emissions data.
- Office of the Commissioners
    - Office of the Chief Clerk (OCC) – provides input on content and distribution of external notification and also coordinates and facilitates any public meetings.
- Office of Compliance and Enforcement (OCE)
    - Field Operations Support Division (FOSD) – provides ambient air monitoring data and technical support in determining the feasibility of monitoring requests. The FOSD provides technical support to Regional Office staff (Field Operations) with issues relating to compliance investigations.
    - Field Operations (Central Texas, Border and Permian Basin, Coastal and East Texas, and North Central and West Texas Areas) – provides local knowledge of areas in and around an APWL area and conducts compliance investigations at facilities that have the potential to emit the pollutant of concern.
    - Enforcement Division – assesses administrative penalties to regulated entities based on impacts analyses of effects on human health and the environment. Information for the impacts analysis is compiled from field investigators, the TD, the FOSD, and other program areas. The Enforcement Division provides corrective actions for entities to achieve compliance if they have not already taken corrective action.
- Office of the Executive Director
    - Agency Communications – coordinates the TCEQ's response to all media inquiries, prepares and distributes agency news releases, coordinates news conferences, and coordinates, produces, and distributes regulatory and general informational materials, both printed and web-based.
    - Intergovernmental Relations Division (IGR) – coordinates the agency response to congressional and state legislative inquiries and constituent issues, legislative initiatives, and interim committee studies affecting the agency. The IGR also coordinates the agency's testimony and participation during legislative sessions to ensure that the Legislature is informed of the TCEQ's initiatives and activities. This includes notification of legislative officials during the consideration, proposal, and delisting of APWL areas. The IGR also coordinates all environmental issues relating to the U.S. and Mexico border.

    - Small Business and Environmental Assistance (SBEA) – provides compliance and pollution prevention assistance to businesses and local governments and reconnaissance support in the regions.
- Office of Legal Services (OLS)
    - Environmental Law Division – provides legal support to other divisions to ensure that actions taken comply with applicable rules and regulations and are legally enforceable and also negotiates with external focus groups.
    - Litigation Division – provides legal support to the Enforcement Division and coordinates the creation of Supplemental Environmental Projects, which can include funding for additional monitoring in APWL areas.
- Office of Air
    - APD – reviews permit applications and coordinates with other TCEQ divisions before authorizing changes to facilities in an APWL area. The Air Dispersion Modeling Team reviews dispersion modeling in support of air permit applications. Part of the review involves accessing ambient air monitoring data, if available.
- Office of Water
    - Water Quality Division – provides technical assistance related to wastewater treatment plants and permits where needed and provides notification of pending wastewater permit applications.

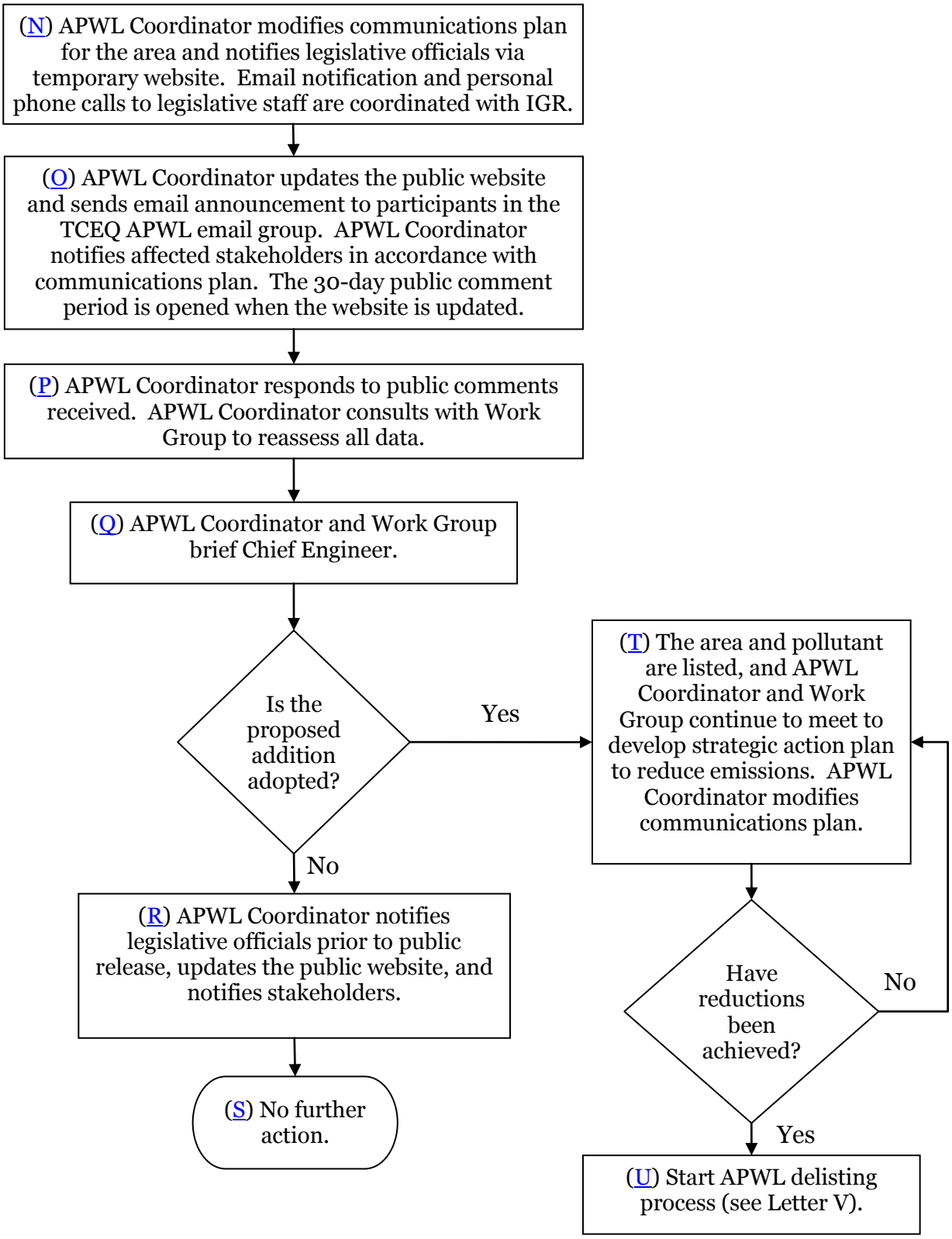
Procedure for Preliminary Evaluation of Potential APWL Areas



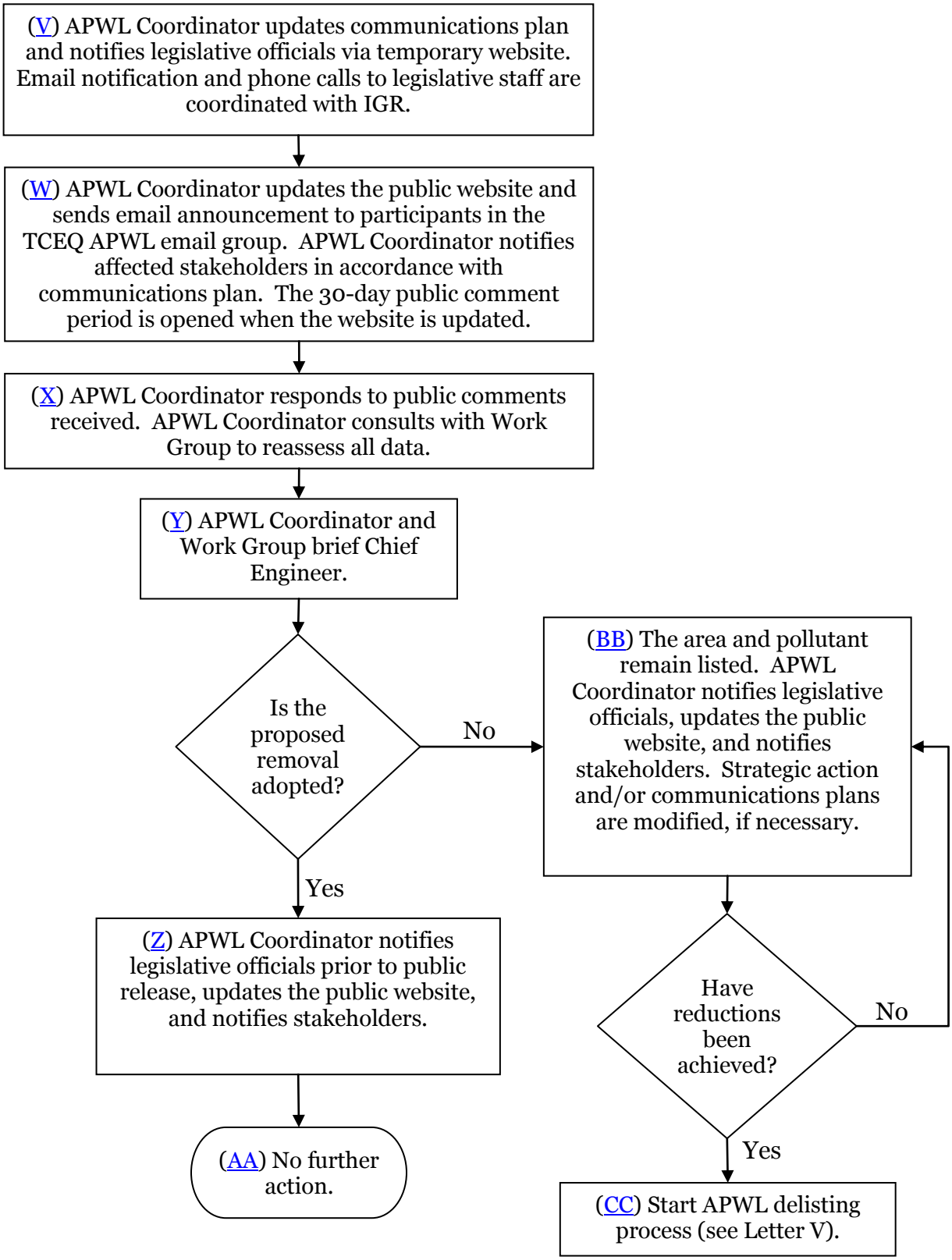
Procedure for APWL Work Group Initiation



Procedure for New APWL Listings and Boundary Reevaluations



Procedure for APWL Delistings



The letters A through CC correspond to the lettered items in the flow chart. For APWL areas that existed before the protocol was drafted in 2010, the APWL process starts at Letter H with the formation of a Work Group.

A. The TD receives mobile or stationary monitoring data that indicates persistent and/or frequent, elevated levels of air toxics above a state standard or AMCV, as applicable, in a particular area. The monitoring data used to make recommendations may be obtained from TCEQ-sponsored monitoring, which is subject to validation by TCEQ Quality Assurance staff, or monitoring sponsored by external entities (i.e., industry, local government, or academia). Although monitoring conducted by external entities may not be validated by TCEQ staff, a monitoring project generally includes some sort of TCEQ-approved quality assurance procedure.

B. The TD contacts the APWL Coordinator, who further investigates the elevated concentrations. Within two weeks of being notified, the APWL Coordinator contacts the appropriate Regional Director, Area Director, FOSD Director, and may also contact county and local air pollution control agencies to solicit input on potential sources, any complaints received, and data validation. Many times, the TD will receive preliminary, unvalidated data and the APWL Coordinator will check with the FOSD to determine if the elevated concentrations are valid before continuing to investigate. In addition, the Regional Office is contacted to determine if the elevated concentrations are due to a single event (i.e., emissions event or maintenance, startup, or shutdown activity) that is not expected to be representative of normal operating conditions. The TCEQ may contact individual companies or other external stakeholders to gather information and notify them of the elevated concentrations.

C. Within approximately one month from the initial notification, the APWL Coordinator completes the initial investigation of the data and documents all information received about the concentrations of the pollutant(s) of concern and any applicable emissions event(s), including the date, time, and quantity of the elevated concentrations; the pollutant(s) of interest; meteorological data; a description of the area, including dominant land use (i.e., industrial, rural, etc.) and proximity to residential areas; a preliminary map of the area and potential sources; and contact information for all persons contacted during the investigation, including a summary of all external communications. The APWL Coordinator provides the compiled information collected during the initial investigation to the TD, who makes a preliminary determination regarding the potential for health effects. The data investigation summary/determination document template is provided in Appendix 4, *Data Investigation Summary/Determination Document*. All data investigation summary/determination documents and supporting data are stored in a database maintained by the APWL Coordinator.

D. Within one week of the completion of the initial investigation, the TD determines whether the monitored ambient air concentrations indicate a potential health concern. The TD relies on the information collected during the initial investigation and best professional judgment to determine both the potential for exposure and the potential for adverse health effects. If, for example, a chemical concentration from a single ambient air sample is slightly above the AMCV, but the sample was collected in an area not frequented by members of the public, the TD may determine that it does not indicate a potential health concern. All factors are considered, and the rationale for the final determination by the TD is documented in the data investigation summary/determination document.

E. If the TD determines through the initial investigation of the data that the detected concentrations of the pollutant(s) do not indicate a potential health concern, no further action is taken by the TD. The APWL Coordinator updates the data investigation summary/determination document and supporting data to include the justification for the decision to not further evaluate ambient air concentrations of the pollutant(s) of concern.

F. If the TD determines in its initial investigation of the data that the detected concentrations of the pollutant may indicate a potential health concern, all data are presented to the Chief Engineer. The Chief Engineer then will determine to continue the investigation of the elevated concentrations or to wait for further information. The APWL Coordinator updates the data investigation summary/determination document to include the final determination.

G. If the Chief Engineer determines that further investigation is not warranted, the APWL Coordinator finalizes the data investigation summary/determination document. No further action is necessary.

H. Within one week of the Chief Engineer's determination that further investigation and possible listing of the pollutant and area on the APWL is warranted, the APWL Coordinator will collaborate with the TD and SBEA to identify necessary program area experts. The APWL Coordinator provides email notification to the appropriate Deputy Director, Area Director, and Division Director from TCEQ programs, as appropriate, which may include the FOSD, Area and Regional Offices, Enforcement Division, Office of the Executive Director, APD, Water Quality Division, OLS, Agency Communications, IGR, SBEA, OCC, and CEO. The internal notification to these programs includes the data investigation summary/determination document and all available data. Each program is given a time frame (typically one to two weeks) in which to assign a representative with expertise in the particular area and/or process(es) that is/are believed to contribute to the elevated levels of the pollutant(s). These experts form a Work Group to focus TCEQ efforts to reduce ambient levels of the pollutant or class of

pollutants in the area of concern. The APWL Coordinator ensures timely progress in setting and attaining goals and aids in coordination of tasks with participants in the Work Group.

The APWL Coordinator will also form a Work Group for existing areas (those areas established prior to the development of the protocol) that undergo a boundary reevaluation if a Work Group was not previously formed. Boundary reevaluations will go through only the applicable steps in the Procedure for APWL Work Group Initiation, such as the preparation of the boundary supplemental documentation in Step I, the briefing procedures in Step K, and boundary finalization procedures in Step M.

The APWL Coordinator will form a Work Group to evaluate if existing APWL areas are ready for the delisting process. Evaluations for removals of existing areas from the APWL will go through the preparation of the boundary supplemental documentation in Step I and the evaluation and briefing procedures in Step U. If the Chief Engineer determines that the area should be delisted, the process will proceed to Step V of the flow chart for the APWL removal.

I. The APWL Coordinator consults with the Work Group to evaluate the available data. The APWL Coordinator utilizes the experts from each program area to draft the boundary proposal and supplemental documentation, as described in the guidance provided in Appendix 5, *APWL Boundary Guidance Document*. The APWL Coordinator compiles and maintains all data obtained in this review in the database. The Work Group also identifies any additional information and technical experts necessary to properly evaluate the situation. This process could take up to two months, depending on the complexity of issues in the area under consideration.

J. From the information available, the APWL Coordinator and the Work Group identify and implement short-term strategies that could reduce ambient concentrations of the pollutant(s) of concern. This step can be done concurrently with the development of the draft boundary proposal. Strategies may include air permit alterations, focused reconnaissance or field investigations, enforcement actions, voluntary emission reduction agreements, enhanced monitoring, and/or compliance agreements. These strategies may focus on installation, repair, or maintenance of pollution control technology; implementation of good housekeeping or best management practices; or similar emission reduction efforts that would reduce ambient air pollutant levels below a level of concern. Implementation of short-term strategies is documented in the data investigation summary/determination document. The APWL Coordinator and Work Group also determine if additional monitoring needs to be conducted in the area to properly assess the cause of the elevated pollutant levels. During this process, potential contributing sources of the pollutant(s) will be notified in an effort

to address the elevated monitored concentrations.[6] The APWL Coordinator and Work Group drafts a communications plan document and record of communications consistent with the guidance provided in Appendix 6, *Communications Plan Guidelines*. All documents generated by the Work Group are maintained by the APWL Coordinator. This short-term strategy implementation process could take approximately one month; however, the specific deadline will be determined by the APWL Coordinator and Work Group on a case-by-case basis.

K. At the end of the deadline for the implementation of short-term strategies, the APWL Coordinator consults with the Work Group to determine if efforts were successful in reducing ambient concentrations of the pollutant. The APWL Coordinator presents a final recommendation to the Chief Engineer. Monitoring data is not necessarily the only indicator of reductions at this point. Reductions can also be determined by the addition of emission control technology to potential sources, repairs of equipment, etc. The Work Group determines if verification site visits or additional monitoring investigations are necessary.

L. If the Chief Engineer, through consultation with the APWL Coordinator and/or Work Group, determines that the ambient concentrations of the pollutant have been reduced and the issue has been fully resolved (i.e., reductions in ambient concentrations or emissions of the pollutant(s) of concern have been achieved in its short-term strategy time frame), no further action is required and the Work Group is dissolved. The APWL Coordinator notifies all stakeholders contacted during the preliminary evaluation and short-term strategy implementation process of the decision to not pursue further emission reduction activities in the area.

M. If the APWL Coordinator and Chief Engineer do not determine that the problem has been effectively resolved, the APWL Coordinator and Work Group finalize the pollutant-specific boundary of the area and start the APWL proposal process.

N. The APWL Coordinator modifies the communications plan as necessary for the proposed area of the APWL. The APWL Coordinator determines the specific means of notification (i.e., certified letter, phone call, or email) and the affected stakeholders (e.g., industry, environmental groups, local programs, and the public). The APWL Coordinator also works with the IGR to notify legislative officials whose districts fall within the proposed APWL

[6] During the brief timeline allotted for short-term strategies and implementation, not all sources that emit the contaminant of concern may be identified and contacted. The Work Group will attempt to contact and collaborate with sources that would have the greatest immediate impact on air quality; therefore, smaller sources may not be notified during this step. If smaller sources are identified, they will be notified as part of the communications plan developed by the Work Group.

area via a temporary website he/she creates. The APWL Coordinator works with the IGR to email legislative officials with the link to the temporary website two weeks prior to the public release of the proposed listing. The information that the APWL Coordinator provides to legislative officials must include the monitoring data related to the area. The APWL Coordinator also works with the IGR to follow up the emails with personal phone calls to legislative staff.

O. The APWL Coordinator updates the public APWL website with details regarding the proposal to add the pollutant(s)/ area to the APWL. Information provided on the website includes, but is not limited to, the APWL boundary, the pollutant(s) of concern, details describing compliance with standards and/or the potential for human health concern, the beginning and end dates of the 30-day public comment period, and information on the public comment procedures. The APWL Coordinator notifies stakeholders in accordance with the communications plan and sends email notification of the updates to the website to all subscribers to the APWL email group.

P. The APWL Coordinator develops a response to all public comments submitted during the comment period. The APWL Coordinator consults with the Work Group to reassess all available data, including any new monitoring data or data provided by potential sources during the comment period, to determine if the pollutant(s)/area will be listed on the APWL.

Q. The APWL Coordinator and Work Group brief the Chief Engineer on the final recommendation to add the proposed pollutant(s)/area to the APWL. The Chief Engineer and executive management make the final determination on whether to adopt the proposed addition to the APWL.

R. If it is decided that the proposed addition to the APWL is not warranted, the APWL Coordinator works with the IGR to provide a one- to two-week advanced notification to legislative officials, including access to a temporary website with information regarding the justification for the decision, and follow-up phone calls to their staff. The APWL Coordinator updates the public website to indicate that the area and pollutant(s) were not added to the APWL, and all supporting documents, including responses to public comments and justification for the decision, are provided on the "Considered But Not Adopted" APWL website. The APWL Coordinator notifies stakeholders in accordance with the communications plan and sends email notification of the updates to the website to all subscribers to the APWL email group.

S. After all notifications of the decision to not adopt the addition to the APWL are made, the APWL Coordinator dissolves the Work Group, and no further action is needed.

T. If the listing of the pollutant(s) and the boundaries are finalized, the APWL Coordinator works with the IGR to provide a one- to two-week advanced notification to legislative officials, including access to a temporary website with final information on the addition, and follow-up phone calls to staff. The APWL Coordinator updates the public website to include the final boundary, responses to public comments, and justification for addition. The APWL Coordinator will contact each company located in the new APWL area and communicate certain expectations of facilities that operate within APWL areas (for example, explain that increases in an APWL contaminant are subject to more stringent permitting requirements, which generally includes offsetting actual increased emissions of APWL contaminants with equivalent reductions). The APWL Coordinator notifies the remaining stakeholders in accordance with the communications plan and sends email notification of the final change to all subscribers to the APWL email group. After the final decision is made public, the APWL Coordinator consults with the Work Group to create a strategic action plan specific to the new APWL pollutant(s)/area, as described in Appendix 7, *Strategic Action Plan Guidelines*. This plan is designed to reduce ambient concentrations of the pollutant(s) of concern and identifies potential internal strategies, collaborative efforts with external stakeholders, and a thorough analysis of all potential actions. The APWL Coordinator also updates the communications plan to keep both internal and external stakeholders engaged and informed in the process. The APWL Coordinator and the Work Group brief the Chief Engineer as necessary to implement or alter the strategic action and communications plans.

U. The TD keeps the Work Group informed of monitored pollutant trends in the APWL area. The APWL Coordinator and Work Group routinely evaluate whether necessary reductions in ambient concentrations of the pollutant(s) of concern are achieved. When the TD determines that monitored concentrations of the pollutant(s) are below a level of concern, the APWL Coordinator and Work Group brief the Chief Engineer and recommend that the Work Group begin the delisting process. The Chief Engineer must approve the decision before the APWL delisting process begins.

V. The APWL Coordinator updates the communications plan specific to delisting the APWL area. This plan may include the organization of a press release if/when the recommendation to remove the pollutant(s)/area from the APWL is final. The APWL Coordinator determines the specific means of notification and the affected stakeholders (e.g., industry, environmental groups, public). The APWL Coordinator also works with the IGR to notify legislative officials whose districts fall within the area of the proposed removal via a temporary website he/she creates. The APWL Coordinator works with the IGR to email legislative officials with the link to the temporary website one to two weeks prior to the public release of the proposed delisting. The information that the APWL Coordinator provides to legislative officials must include the

monitoring data related to the area. The APWL Coordinator also works with the IGR to follow up the emails with personal phone calls to legislative staff.

W. The APWL Coordinator updates the public APWL website with details regarding the proposal to remove the APWL pollutant(s)/area. Information provided on the website includes, but is not limited to, a description or map of the APWL boundary, the pollutant(s) of concern, details supporting the decline in ambient concentrations of the pollutant(s) of concern, and justification for the determination that monitored concentrations meet standards and/or are no longer a potential health concern. The beginning and end dates of the 30-day public comment period and information on the public comment procedures are also provided. The APWL Coordinator notifies stakeholders in accordance with the communications plan and sends email notification of the updates to the website to all subscribers to the APWL email group.

X. The APWL Coordinator develops a response to all public comments submitted during the comment period. The APWL Coordinator consults with the Work Group to reassess all available data, including any new monitoring data or data provided by potential sources during the comment period, to determine if the pollutant(s)/area should be removed from the APWL. The Work Group may evaluate whether or not to revise the existing boundary based on available data and comments received.

Y. The APWL Coordinator and Work Group brief the Chief Engineer on the final recommendation to remove the proposed pollutant(s)/area from the APWL. The Chief Engineer and executive management make the final determination on whether to adopt the proposed removal from the APWL.

Z. If the delisting of the pollutant(s)/area is finalized, the APWL Coordinator works with the IGR to provide a one- to two-week advanced notification to legislative officials, including access to a temporary website with final information on the decision and follow-up phone calls to staff. The APWL Coordinator updates the public website to include the responses to public comments and justification for delisting. The APWL Coordinator notifies stakeholders in accordance with the communications plan and sends email notification of the final change to all subscribers to the APWL email group.

AA. After the final decision is made public, the APWL Coordinator dissolves the Work Group. The APWL Coordinator ensures that all documentation regarding the former APWL area is maintained and available to the public, either on the archived website or upon request.

BB. If it is decided that the proposed removal from the APWL is not warranted, the APWL Coordinator works with the IGR to provide a one- to two-week advanced notification to legislative officials, including access to a

temporary website with information regarding the justification for the decision, and follow-up phone calls to their staff. The APWL Coordinator updates the public website to indicate that the pollutant(s)/area were not removed from the APWL, and all supporting documents, including responses to public comments and justification for the decision, are provided on the "Considered But Not Adopted" APWL website. The APWL Coordinator also determines if modification to the communications plan is necessary and notifies the remaining stakeholders in accordance with the communications plan. The APWL Coordinator sends email notification of the updates to the website to all subscribers to the APWL email group. The APWL Coordinator and Work Group reassess the available information on the area and pollutant(s) of concern to determine if amending the strategic action plan is necessary and/or if additional air monitoring or compliance investigation activities are required. These additional activities will be contingent upon availability of resources (i.e., personnel and equipment). The APWL Coordinator and Work Group will continue to implement emission reduction plans and gather additional air monitoring data until sufficient reductions have been made to be able to remove the pollutant(s)/area from the APWL.

CC. If the TD determines ambient air concentrations of the pollutant(s) of concern have been achieved, the APWL Coordinator and Work Group brief the Chief Engineer and recommend that the Work Group begin the delisting process. If approved by the Chief Engineer, the Work Group will begin the delisting process described in Step V.

Appendix 1

Acronyms

Acronyms

AMCV	Air Monitoring Comparison Value
AMDA	Air Modeling and Data Analysis Section
APD	Air Permits Division
APWL	Air Pollutant Watch List
CEO	Chief Engineer's Office
EAS	Emissions Assessment Section
FOSD	Field Operations Support Division
IGR	Intergovernmental Relations Division
OCC	Office of the Chief Clerk
OCE	Office of Compliance and Enforcement
OLS	Office of Legal Services
SBEA	Small Business and Environmental Assistance
SIP	State Implementation Plan
TCEQ	Texas Commission on Environmental Quality
TD	Toxicology Division

Appendix 2

Program-Specific Procedures

Chief Engineer's Office

APWL Coordinator

The APWL Coordinator organizes, oversees, and coordinates all activities related to current and potential APWL areas. The APWL Coordinator conducts the initial investigation of elevated concentrations of a pollutant at the request of the TD. If the TD determines that monitored concentrations and the information provided by the APWL Coordinator during the initial investigation indicate a potential health concern, the APWL Coordinator consults with appropriate program area experts in the TCEQ to evaluate the potential sources of the pollutant(s) in the area and implement strategies to reduce emissions of the pollutant(s). The APWL Coordinator also coordinates with program area experts to create all APWL-related documents and updates, maintains, and distributes those documents as necessary. The APWL Coordinator serves as the liaison for the TCEQ in coordination with external stakeholders, appropriate TCEQ offices, legislators, and the regulated community. The APWL Coordinator will assess the need to secure additional help from entities outside of Texas or the U.S. for areas located near an international or state border.

Toxicology Division

The TD routinely receives ambient air monitoring data from stationary network monitors and mobile monitoring investigations. The TD compares these monitored concentrations to state standards (in the case of sulfur dioxide and hydrogen sulfide) or the pollutant-specific, health- and welfare-protective AMCVs, which the TD derives from the available scientific literature.[7] The TD also considers information about the potential for exposure, representativeness of the samples, meteorological conditions, and other factors to help determine the potential for health effects.

The TD communicates conclusions about the potential for adverse health effects to other divisions of the TCEQ through health effects evaluation memos and the final determination of the potential for health effects in the data investigation summary/determination document. All of these documents are maintained in a database by the TD or APWL Coordinator. Annual health effects evaluation memos of stationary network monitoring data are available on the TD's public website. Health effects evaluations of mobile monitoring projects and data investigation summary/determination documents are available from the TD or APWL Coordinator by request.

[7] The guidelines for deriving AMCVs and the values the TD derives for air permit evaluations was externally peer reviewed by world renowned experts in the field of inhalation toxicology and had two rounds of public comment. The TD guidelines are publicly available on the TD's website.

Air Quality Division

In general, air quality research funds from the Air Quality Division may be used to develop relevant data on air pollution as needed. The use of these funds must be consistent with TCEQ priorities and needs, as identified by the Chief Engineer. Other efforts by the Air Quality Division are handled by the EAS or AMDA Sections.

Emissions Assessment Section

The EAS does not have a current process specific to the APWL, and it is unlikely that a process will be created. This section responds to data requests for information regarding a facility or area. Because the section currently provides data support for multiple TCEQ needs, the data retrieval process will remain the same for the APWL as for most other internal or external data requests. The EAS will continue to provide timely data on an as-requested basis and remains flexible to help meet unseen APWL needs.

Current review standards for the emissions inventory are risk-based. Some sites are subjected to more intensive review or data collection based on several factors, including magnitude or type of emissions, location of the source, or other current business requirements in the section or agency. Additionally, sources may have industry- or category-specific criteria used in the review process to ensure a complete and accurate inventory. Consistent with the processes used when any business requirements change, EAS management will determine if the level of review or information collected for the APWL is appropriate. Modifications will be made, if needed.

Air Modeling and Data Analysis Section

As with the EAS, the AMDA does not have a particular defined process specific to the APWL. The most pertinent functions this section provides are to analyze ambient air quality data and other data (e.g. emissions inventory, maintenance, startup, and shutdown events, and company records) as needed, to identify trends and patterns in pollutants, and to understand its sources better.

The AMDA currently performs analyses that range from long-term (e.g. multiple analyses in support of the SIP) to very short-term (e.g. conditions, concentrations, and possible causes of an ozone exceedance a day or two earlier). The section is experienced in responding to requests covering a range of timelines, as much of its workload originates from requests, and this is likely the role the AMDA will play in the Work Group process.

Office of Compliance and Enforcement

Enforcement Division

The Enforcement Division assesses administrative penalties to regulated entities based on impacts analyses on human health and the environment. For alleged violations that are documented by an investigation, a record review, or by a TCEQ Program Area *and* that are referred to the Enforcement Division, an Enforcement Coordinator will be assigned to the case. The Enforcement Coordinator is responsible for developing the enforcement case, which includes assessing administrative penalties that are consistent with the current penalty policy and protocol, and for identifying any corrective actions that the owner or operator must take or has already taken to achieve compliance with the state and/or federal rules. Each enforcement case is reviewed and approved by the management within the Enforcement Division.

Alleged violations can also be documented in a disclosure by the owner or operator under the Texas Environmental, Health, and Safety Audit Privilege Act (Audit Act). For violations disclosed under the Audit Act, the Audit Act allows immunity to the owner or operator from any enforcement action as long as the owner or operator has disclosed the violations and is taking actions to resolve the violations in a reasonable amount of time. For environmental audits that are conducted at a major source in order to review compliance with the requirements of the Title V Operating Permits Program, the Enforcement Division will determine, on a case-by-case basis, the consideration for immunity from administrative and civil penalties afforded by the Audit Act. The owner or operator and the Enforcement Division management will negotiate the terms of a compliance agreement that allows the owner or operator to develop a plan to achieve compliance with the state and/or federal rules in a reasonable and timely manner.

Field Operations Support Division

Program Support Section

The Program Support Section is charged with providing technical resources and guidance in areas or issues beyond the normal day-to-day expertise of regional staff. Program Support Section staff coordinate issues affecting the regions between divisions within OCE and other program areas of the TCEQ and work to ensure consistent application and implementation of procedures across all regions.

There are several APWL areas in different parts of the state that may have unique circumstances; however, regions will need to follow certain standard procedures in all APWL areas. Where differences exist, regions will need to develop procedures applicable to the area that are consistent with the guidelines of this protocol. The Program Support Section will assist regional staff and management with determining what current procedures exist for APWL areas and, where appropriate, assist with coordinating new procedures and applying limited resources (i.e. time, skill sets, and equipment) in support of APWL strategic action plans.

Mobile Monitoring and Deployment Section

The Mobile Monitoring and Deployment Section offers consultative assistance to the TD and the APD by providing technical assistance, identifying logistical issues, and preparing a cost estimate. Technical assistance typically includes identifying the type of monitoring equipment, test methods, and mobile monitor site locations. The section will provide guidance on the most feasible way to meet the needs of the TD and the APD.

For fixed monitoring sites, the section builds new monitoring locations based on input from the TD and modeling data, as well as availability to electrical utilities and proximity to roadways.

When industries conduct monitoring as part of an agreement with the TCEQ, the section provides assistance to ensure that the monitoring location will meet the TCEQ standards.

The best monitoring approach for an area may be mobile monitoring, as opposed to a fixed site. After careful review, and if resources permit, the section will provide mobile monitoring to APWL areas.

Data Management and Information Technology Section

The Data Management and Information Technology Section collects, displays, reports, and archives ambient air monitoring data. This section also manages, reviews, validates, qualifies, and uploads air monitoring data to the U.S. Environmental Protection Agency Air Quality System database. In addition to providing meteorological and air quality forecasts, the section maintains the technical reporting and display infrastructure (data polling, web architecture, and databases) for ambient air data at the TCEQ.

When industries conduct monitoring as part of an agreement with the TCEQ, the Data Management and Information Technology Section provides assistance in acquiring and displaying data for public and/or agency access and assistance with the use of databases to store monitoring measurements and meteorological data. The section provides training and guidance in the use of validation tools and procedures to ensure that the data that are collected and displayed are comparable to the data collected by the TCEQ.

Regional Offices

Regional Offices can make significant use of APWL information when planning regional investigation activities. Additional reconnaissance and targeted site investigations can be conducted at sources within an APWL area in a direct effort to identify unknown or under-reported sources of the contaminant of concern. In some cases, a special project team can be developed within the region to focus on a particular APWL area and develop detailed investigation and monitoring strategies. Through the APWL Work Groups and communications with the APWL Coordinator, Regional Offices can partner with other divisions of the TCEQ to utilize all available information to identify potential issues yet to be addressed. Depending on the APWL area, Regional Offices may also establish and utilize triggered notifications for targeted compounds at specific air monitoring stations to identify activities that may contribute to elevated ambient pollutant levels. Regional Offices may also work directly with the Office of the Executive Director and others to develop voluntary compliance agreements with entities to reduce emissions.

Office of the Executive Director

Small Business and Environmental Assistance

SBEA currently does not have a process specific to APWL areas; however, there are several opportunities for the division to be more involved in APWL areas.

Small Business and Local Government Assistance

Staff will provide compliance assistance to businesses located in APWL areas.

A Compliance Commitment (C2) Site Visit in an APWL area may include increased pollution prevention ideas from the contractor. EnviroMentors (EMs) will incorporate additional pollution prevention ideas when possible. EMs may be assigned to troubled sites in an APWL area if they emit the contaminant of concern.

Office of Air

Air Permits Division

The APD ensures that permit review staff are aware and informed regarding areas of concern, pollutant(s) of concern, and facilities located in APWL areas. Permit review staff are alerted to any projects received by the APD within an APWL area. Data is entered into the New Source Review Permits Information Management System for documentation and tracking purposes. Permit review staff are required to follow the guidance provided in the APDG 5874, Modeling and Effects Review Applicability (MERA), process. The MERA Reference Guide is available on the APD's website.

In addition, the TD's mobile monitoring and regional monitoring analyses are provided to APD management and staff. The APD currently sends emails to appropriate TCEQ management prior to issuance for projects in APWL areas according to the MERA process. These emails include the proposed draft permit, the technical review, and any other pertinent information or memos. They also provide a final opportunity for key areas of the agency to address any remaining concerns.

Office of Water

Water Quality Division

An ongoing function of the Water Quality Division will be to provide a notification through internal processes of any pending wastewater permit application for both domestic and industrial wastewater discharge permits. Pending applications may include renewal of existing permits, amendments to existing permits, or applications for new facilities. Currently, this notification is supplied to TCEQ Regional Offices and the APD so they can evaluate them against the APWL needs. This process now includes notification to the APWL Coordinator.

Appendix 3

Functional Roles in Work Groups

Chief Engineer's Office

APWL Coordinator

The APWL Coordinator is the leader of each Work Group and, in addition to other functions, is responsible for the following tasks in every Work Group:

- Investigation of elevated concentrations of air toxics or other pollutant(s) of concern at the request of the TD;
- Creation, compilation, and maintenance of data investigation summary/determination documents completed in collaboration with the TD and program area experts;
- Creation and maintenance of a database of completed data investigation summary/determination documents;
- Collaboration with program area experts to identify and implement strategies to reduce ambient concentrations of pollutant(s);
- Preparation and distribution of the Annual Report on the APWL Areas in Texas, as well as other applicable reports and recommendations for presentation to the Chief Engineer, executive management, and/or Commissioners;
- Development and implementation of communication plans regarding current or potential APWL areas;
- Creation and maintenance of an email group to notify interested internal and external stakeholders regarding changes and updates to the APWL website;
- Creation and maintenance of the public APWL website and any temporary websites for notification of legislators;
- Compilation, review, and response to public comments regarding current or potential APWL areas;
- Facilitation of negotiations with external stakeholders, legislators, and the regulated community;
- Participation in internal and external meetings regarding current or potential APWL areas;
- Oversight of the planning and coordination of cross-agency work groups, to include tracking project plan development, task scheduling, timelines, and oversight of stakeholder meetings;
- Briefing of executive management on APWL activities on a regular basis; and
- Representing the TCEQ and the CEO before the Legislature and in meetings with TCEQ staff, the U.S. Environmental Protection Agency, the regulated community, the public, and other stakeholders.

Toxicology Division

The TD is responsible for the following tasks in every Work Group:

- Compilation of health effects evaluations from previous mobile monitoring investigations and/or stationary monitoring data;

- Recommendation to the Chief Engineer that monitored concentrations of a pollutant indicate a potential health concern and should be addressed through the APWL process;
- Identification of experts in other program areas of the TCEQ who can help investigate elevated concentrations and identify potential contributing sources and solutions;
- Creation and maintenance of the geographic information systems (GIS) APWL boundary layer file that geographically delineates the boundary of APWL areas using satellite imagery;
- Creation and maintenance of APWL maps for the public APWL website; and
- Recommendations to the APWL Coordinator, Work Group, and Chief Engineer regarding monitored trends of pollutant(s) in APWL areas.

Air Quality Division

Air Modeling and Data Analysis Section

The AMDA can offer technical and statistical support as needed to Work Groups in many aspects of APWL activities, including listing, delisting, and various stages in-between.

With respect to the APWL process, the AMDA's primary strength is analyzing air pollution data, both monitoring data and reported emissions (i.e. emissions inventory). While TD would make the initial recommendation on whether an area needs to be listed based on monitoring data, the AMDA can provide supplemental support as needed.

Below are some examples of other analyses the AMDA can conduct to support the APWL process:

- Characterization of emissions and emission source(s)[8]
  - **Temporal**
    - How do measured concentrations vary over time scales, e.g., by hour/day/month, etc.?
    - Are there reasons, other than emissions from the suspect sources, that could explain these temporal changes in measurements?
    - Do increases in ambient concentrations track reported maintenance, startup, and shutdown events?
    - If not, are there any data from the company (operating records, plant staff observations) that explain increases/changes in measured concentrations?
    - *Results from these analyses can help reveal the nature of the source(s) and the problem(s) behind the excess emissions.*

[8] Value gained from the analyses will depend on how often, and in how many locations, measurements are taken. If just a few samples are taken, for example, it is difficult to say much, if anything, about emission sources. For most spatial analyses, wind direction (and sometimes wind speed) data are needed.

    - **Spatial**
        - Do monitoring data show "problem" emission sources within a plant that are different than, or in addition to, what is reported in the emissions inventory?
        - Are there plants in an APWL area that are considered insignificant based on small reported emissions, but are emitting more than reported and are problem sources?
- Statistical analysis
    - Trends – how are concentrations changing over time, and are these changes statistically robust?
    - Do changes in measured concentrations track changes in processes reported by a company?
    - Do changes in concentrations or company-reported emissions track other variables such as frequency of complaints?
- Mapping / Google Earth applications – AMDA staff is available to develop Arc-based maps and/or Google Earth flyovers with data overlays; the latter especially enable interested parties to better see all relevant data in a specific area.
- Photochemical modeling – This activity is unlikely to be needed in the APWL process, as it is primarily used as a tool to predict ozone concentrations; but if needed and requested, it could be provided.

Emissions Assessment Section

After a potential APWL site or area is identified and depending on the characteristics of the proposed APWL area (i.e. more than one site of interest and/or more than one contaminant of concern versus a known source), the EAS contact will identify a representative to serve on the Work Group.

Upon request by the Work Group, staff will identify the location and magnitude of potential sources of the pollutant(s) in an APWL area through database and any other appropriate research. These databases include, but are not limited to:

- The State of Texas Air Reporting System (STARS) – an annual emissions inventory of major industrial sites in Texas collected and maintained by EAS staff.
- Toxics Release Inventory – a publicly available U.S. Environmental Protection Agency database containing information on toxic chemical releases and waste management activities reported annually by certain industries and federal facilities.

Office of the Commissioners

Office of the Chief Clerk

The OCC can offer support to Work Groups with regard to external notices and public meetings.

Specifically, the OCC can provide the following assistance:

- Coordinate with Agency Communications on external notices.
- Identify the type of notice.
- Provide input on notice content.
- Identify recipients of the notices such as elected officials, individuals, and community groups.
- Coordinate and facilitate public meetings.

Office of Compliance and Enforcement

Enforcement Division

Depending on the characteristics of the proposed APWL area (i.e. more than one site of interest and/or more than one contaminant of concern versus a known source), the Enforcement Division will identify a representative to serve on the Work Group.

If an alleged violation has occurred for an owner or operator located in a proposed APWL area, it must be documented that an alleged violation occurred and the alleged violation must satisfy the criteria for initiating an enforcement action before an enforcement case is referred to the Enforcement Division.

For unauthorized emissions of pollutants on the APWL, the Enforcement Division will use discretion to assess appropriate penalties to discourage such releases into the atmosphere and to ensure that the owner or operator achieves compliance in a timely manner.

The Audit Act allows immunity to the owner or operator from any enforcement action as long as the owner or operator has disclosed of the violations under the Audit Act and is taking actions to resolve the violations in a reasonable amount of time. The owner or operator and the Enforcement Division management will negotiate the terms of a compliance agreement that allows the owner or operator to develop a plan to achieve compliance with the state and/or federal rules in a reasonable and timely manner.

Field Operations Support Division

The functional role of the FOSD will vary, depending on the APWL area and pollutant(s). It is anticipated that the FOSD representative will change as the needs of the Work Group change.

The Mobile Monitoring and Deployment Section's functional role in the Work Group will be to ensure that the Work Group is grounded in what is possible and technically feasible with respect to meeting monitoring needs. This section will assess monitoring needs and determine what resources can be allotted to meet the monitoring request from the Work Group. In areas where real-time data are available, the Mobile Monitoring and Deployment Section notifies the TD when elevated concentrations are observed.

A representative from the Data Management and Information Technology Section will provide available data from a proposed APWL area. After an APWL area is listed, the Data Management and Information Technology Section will provide available data to assess improvements in ambient air quality. For areas where no data are available, the Mobile Monitoring and Deployment Section may provide mobile monitoring support.

The Program Support Section will act as a liaison between the FOSD and the regional staff.

Regional Offices

Given the location of the proposed APWL area, one or more representatives from the applicable Regional Office will serve on the Work Group. The regional representative will likely have first-hand knowledge of the area or facilities in question and should be able to answer a myriad of questions concerning facility operations, potentially affected receptors, compliance history of potential sources, the geography of the area, etc. Any strategy to address the pollutant(s) will include field reconnaissance and on-site investigations and the regional representative will be able to speak to the capabilities of regional investigators.

Depending on the number and complexity of the potential sources within the AWPL area, the Regional Offices can implement one or more of the following investigation types:

- On-site comprehensive compliance investigations – a thorough review of all operations at a source facility. This includes an evaluation of all state and federal rules applicable to the site.
- Fence-line reconnaissance – observations of potential sources made from public property or with permission from an adjacent land owner. In many cases, reconnaissance investigations will include the use of the GasFindIR camera or other sampling or monitoring equipment.
- Focused investigations – an on-site investigation covering a specific area or process. This type of investigation will typically include the use of sampling or monitoring equipment.

The regional representative will bring local knowledge of the APWL area and potential sources to the Work Group and will help to ensure that an effective investigation strategy is implemented.

Office of the Executive Director

Small Business and Environmental Assistance

Depending on the characteristics of the proposed APWL area (i.e. more than one site of interest and/or more than one contaminant of concern versus a known source), the SBEA contact will identify a representative to serve on the Work Group. The representative will be either a multimedia representative or a specialist.

Depending on the source and complexity of the AWPL area, the following SBEA programs and personnel may be involved and may be able to assist with preventing an area's APWL listing by conducting the following activities:

- Small Business and Local Government Assistance Compliance Visit: Regional Small Business and Local Government Assistance staff may be able to conduct a compliance site visit to identify areas of non-compliance or fugitive emissions from small suspect sources.
- Small Business and Local Government Assistance EnviroMentor (EM): If specific compliance issues are identified that require expertise at a facility eligible for the EM program, an EM may be able to assist. Examples may include developing best management practices, designing proper pollution control equipment, or identifying better engineering controls.
- SBEA, in conjunction with the regional staff, will help to identify potential sources and may be able to assist with surveys or sampling.

If the specific source cannot be identified, SBEA may send postcards to target industries associated with a particular pollutant and increase awareness.

Office of Legal Services

Environmental Law Division

The Environmental Law Division will work in a support capacity to do the following:

- Assist with review of notices to external sources prior to mailing/emailing;
- Coordinate with counsel for affected or potentially affected entities/sources when necessary;
- Provide legal support to other divisions (TD, APD, Water Quality Division) regarding applicable rules and administrative proceedings;
- Prepare and/or coordinate responses to inquiries from legislators and public officials;
- Assist with preparation of responses to public comments for those areas proposed for APWL listing or delisting; and
- Provide legal support for the APD and Water Quality Division for APWL-focused permit applications.

Litigation Division

The Litigation Division will work in a support capacity to assist with the following:

- Process APWL-focused enforcement actions that are not resolved by the enforcement coordinator; and
- Negotiate Voluntary Emission Reduction Agreements and Supplemental Environmental Projects, which may include additional monitoring or investigations in APWL areas.

Office of Air

Air Permits Division

Depending on the characteristics of the proposed APWL area (i.e. predominant industry type, more than one site of interest and/or more than one contaminant of concern), the APD contact will identify an appropriate representative to serve on the Work Group.

Depending on the source and complexity of the APWL area, the following APD practices will continue as appropriate:

- Assisting other parts of the agency to provide pertinent information for sources in an APWL area regarding authorized facilities as well as recommending emission reduction or control strategies;
- Providing modeling assistance or information for an APWL area;
- Soliciting comments from other areas of the TCEQ (OCE - FOSD, Enforcement Division, and Area/Regional Offices; CEO - Air Quality Division, TD; OLS – Litigation Division; and SBEA) to address items as appropriate for permit actions in APWL areas;
- Coordinating with TD prior to approving any modifications or new permits that would authorize an increase in hourly or annual emissions of a contaminant of concern within an APWL area;
- Encouraging controls, decreases, and/or offsets for contaminants of concern in APWL areas;
- Employing more stringent permit requirements for applications currently under review;
- During permitting reviews, identifying issues or concerns that should be considered for future permit actions; and
- Requiring the applicant to indicate in the application whether or not the proposed permit action will be located in an APWL area.

The following practices could be employed by the APD for APWL projects on a case-by-case basis:

- Implement the practices above in reviews for permits by rule and standard permits in APWL areas;
- Notify applicants in outgoing APD communications if they are operating within an APWL area and the potential to affect future permitting (similar to poor performer language);
- Shorten the renewal cycle of permits in APWL areas emitting contaminants of concern to a 5 year renewal cycle, in accordance with Texas Health and Safety Code §§382.0518 and 382.055;
- Restrict the use of permits by rule and standard permits if the facility emits contaminants of concern (impacts driven);
- Require site-wide modeling for modifications; and

- Use GIS data and APWL boundaries to automate a report that updates the list of facilities in each APWL area on a daily basis.

Office of Water

Water Quality Division

The Water Quality Division representative will be available to discuss technical issues regarding the design and operation of domestic wastewater treatment plants, to provide information about the treatment used at industrial facilities, or to discuss other pertinent information regarding facilities with a wastewater discharge permit as the Work Group deems necessary.

Appendix 4

Data Investigation Summary/Determination Document (Draft)

TCEQ Toxicology Division Data Investigation Summary/Determination

Date:

Toxicologist:

Investigation Type: Is the exceedance odor- or health-based?

Pollutant(s) of Interest:

Date, Time, and Quantity of Elevated Concentrations:

Description of the Area:

TCEQ Region:

Region Contact:

Information from Region:

Potential Sources:

Wind Direction:

Summary of External Comments:

Health Effects Evaluation:

Notes:

Status:

Updates:

Determination: Is there a potential health concern?

****Please be sure to include a map of the area with a 3 mile radius boundary.****

Appendix 5

APWL Boundary Guidance Document (Draft)

Guidelines to Delineate Boundaries for Air Pollutant Watch List Areas

Introduction

This document is intended to provide a general overview of the process used to define the boundary of a new APWL area as of 2010. Recognizing that each air quality issue and location is unique, the information in this document is not intended to be an all-encompassing explanation of how the TCEQ determines an APWL boundary. A full explanation of the process behind delineating each boundary for an individual area listed on the APWL, including all site-specific evaluations of the data, will be provided in a supplemental document. Public access to this supplemental document will be posted as a link on the TCEQ APWL website.[9]

Background

A pollutant and/or area's listing on the APWL is dependent on ambient air monitoring data. This data can be obtained from the TCEQ's extensive stationary monitoring network, mobile monitoring investigations, special purpose monitoring projects, and/or monitoring conducted by external entities. The TCEQ currently has the ability to monitor for approximately 150 pollutants, including volatile organic compounds, polycyclic aromatic hydrocarbons, carbonyls, particulate matter, metals, and total reduced sulfur compounds, including hydrogen sulfide.

Monitored concentrations of these air pollutants are compared to the TCEQ's health-protective comparison values (AMCVs) and state standards (if available). The current list of target analytes and their respective AMCVs can be found on the TD website. The TD uses AMCVs as a screening tool to determine a pollutant's potential to cause short- and long-term adverse health effects. In general, the health-based AMCVs are set to provide a margin of safety and therefore are set well below levels at which adverse health effects are expected to occur. If a pollutant concentration in the ambient air is less than its AMCV, no adverse effects are expected to occur. If a pollutant concentration exceeds its AMCV, it does not necessarily mean that adverse effects will occur, but rather that further evaluation is warranted.

If a pollutant is detected above its health-based AMCV or state standard, the TD contacts the APWL Coordinator requesting that he/she conduct an initial investigation of the elevated concentrations in accordance with the APWL protocol. The APWL Coordinator contacts experts in other program areas of the TCEQ as needed to solicit input on potential sources, identification of circumstances that may have contributed to the monitored elevated concentrations of the pollutant(s), and data validation. The APWL Coordinator provides the compiled information collected during the initial

[9] General information about the APWL, including a link to any supplemental documents related to an individual APWL area may be found on the APWL website.

investigation to the TD, who makes a preliminary determination regarding the potential for health effects. From the data obtained during this investigation, the TD determines if there is a potential health concern. The APWL Coordinator briefs the Chief Engineer, who determines whether or not the monitored concentrations of the pollutant(s) indicate a potential health concern that should be addressed through the APWL. The boundary delineation process outlined in this guidance document only pertains to those pollutant(s) identified as a potential health concern that should be addressed through the APWL.

Further Evaluation and Boundary Delineation

If monitored ambient concentrations of a pollutant(s) are determined to be of potential health concern that should be addressed through the APWL, the APWL Coordinator collaborates with the TD and SBEA to assemble a Work Group of experts from program areas across the TCEQ.[10] The Work Group draws upon the expertise of its individual participants to conduct a more thorough evaluation of all available data. Several factors are considered in this evaluation, including but not limited to, the following:

- Ambient Air Monitoring Data (mobile and/or stationary)
  - Magnitude and frequency of any exceedance(s)
  - Source-determination analyses
  - Trend analyses (e.g., seasonal emissions)
  - TD's health effects review memos of mobile and ambient air monitoring data
- Supplemental Data
  - Compliance history (e.g., number of odor complaints in the area)
  - Emissions inventory data from facilities
  - Proximity to residential areas and high-traffic roadways
  - Designated land use (e.g. commercial-industrial, residential, agricultural)
  - Pollution prevention efforts

The Work Group uses the information gained during the evaluation process to identify an area that includes the potential source(s) of the elevated concentrations of the pollutant, which will serve as the APWL boundary. The edges of this boundary will be defined by the closest manmade (e.g., streets, highways, or structures) or geographical boundaries. Because each air quality issue and location are unique, the specific factors taken into consideration for the defining of the boundary will be detailed in a supporting document with a GIS map showing the location of the proposed boundary. The boundary and supporting documentation are reviewed and approved by the Work Group and their management and are provided to the Chief Engineer as part of the recommendation to add the pollutant(s) and area to the APWL.

[10] See Appendix 3 for a complete list of participating program areas.

Final Decision

Once the boundary has been approved, the APWL Coordinator will compile the full recommendation to add the APWL area to the APWL list, which will include the GIS map of the location, explanation of why the pollutant(s) and area are proposed to be added to the APWL, and the supporting documentation for the boundary. The APWL Coordinator ensures that the recommendation and supporting information are in compliance with TCEQ Internet accessibility standards and posts them on a temporary website created for legislative officials. Legislators whose districts are in the proposed APWL area will receive a two-week advanced notification of the recommendation and will be provided access to the temporary website. Following legislative notification, the recommendation and all documentation will be put on the public APWL website. The public is given a 30-day period to provide comments on all information provided. After the close of the public comment period, the APWL Coordinator consults with the Work Group to reassess all available information. The APWL Coordinator and Work Group present a final recommendation to the Chief Engineer to (a) finalize the recommendation and add the pollutant(s) and area to the APWL, or (b) reject the initial recommendation and move the information to the APWL "Considered but Not Adopted" website. Additional information about the process for adding pollutants/areas to the APWL can be found on the APWL website.

APWL Boundaries Defined Before 2010

Boundaries of APWL areas that were finalized before 2010 underwent a procedure similar to the process described in this guidance document. Because these boundaries have already been established, an additional public comment period will not be provided for the existing boundaries; however, the APWL area boundaries may be reevaluated from time to time as warranted. Should additional review indicate the need for an adjustment (e.g. increasing or decreasing the geographical boundary or adding new sources within the area) to an APWL area, the APWL Coordinator and Work Group will follow the guidelines in this document, opening up any proposed changes for public comment.

Boundary Reevaluation

The APWL Coordinator may form a Work Group to reevaluate an existing APWL boundary based on the most current information available. Specifically, the group will identify any new potential contributing sources in or near each APWL area, recognize any changes to the contributing sources previously identified or the designated land use of the APWL area, and evaluate the results of any additional ambient air monitoring data and field reconnaissance investigations. Conclusions from this reevaluation are documented in the boundary supplemental documentation, which will be made available on the APWL website. If it is determined that a boundary should be adjusted to reflect new information, the APWL Coordinator and Work Group will follow the

guidelines described in this document (including the opportunity for public comment) to propose and finalize the new boundary. Boundaries may be expanded or reduced in size.

Questions and Comments

Please contact the APWL Coordinator with any questions or comments regarding the information in this guidance document or the APWL via the toll-free main number at (877) 992-8370 or via email at APWL@tceq.texas.gov.

Appendix 6

Communications Plan Guidelines

Communication Plan Guidelines

Overview

Effective communication is an essential element in implementing the APWL program. It is critical for the TCEQ to communicate any potential health concern, the monitoring information used to make such determination, how the APWL is used to reduce ambient concentrations below a level of potential concern, and to receive input from stakeholders. The APWL Coordinator and Work Group will identify interested external stakeholders. The Communications Plan is a document to be developed by the APWL Coordinator, with input from the Work Group, to describe the strategy for effectively identifying and notifying all affected stakeholders in an APWL area and record all communications that occur during the APWL process. The Communications Plan is a document that will be solely used by the APWL Coordinator and will not be published on the TCEQ's website.

As the Work Group is formed and the short-term strategies to reduce pollutant(s) of concern are identified, the Communications Plan for the area of concern will evolve to meet the communications needs of the Work Group. It is anticipated that interested stakeholders could change throughout the consideration, listing, and delisting process, and the Communications Plan will need to adapt to meet the goals identified in this guidance. The Work Group will determine appropriate timelines for completing the objectives. The following Communication Plan Guidelines provide topics to consider when making the Communications Plan document. These topics are in addition to the mandatory tasks outlined in the APWL protocol that must be completed. Work Groups will determine the specific communications needs of the APWL areas and will document the actions taken to keep all stakeholders informed. Agency protocols must be followed when contacting external stakeholders, including working with Agency Communications (Media Relations) and the IGR, as appropriate.

The TCEQ staff that creates the Communications Plan may be different than the Work Group participants in the implementation phases. The APWL Coordinator will determine if additional Work Group members are needed for the development of the Communications Plan.

Potential external stakeholders to be notified through implementation of the Communications Plan are local programs and governmental entities, local organizations (such as community advisory councils and panels), private citizens, environmental groups, members of the news media, legislative and elected officials, members of academia, and members of the regulated community and trade associations (such as the Air and Waste Management and Texas Oil and Gas Associations). The Communications Plan needs to allow the APWL Coordinator to convey the often highly technical information to all of these stakeholders in an understandable way. The Work Group will also identify the types and efficiencies of the available communication methods and determine if additional needs exist.

The APWL Coordinator and Work Group will determine appropriate timelines for all communications and will document them in the Communications Plan. The Work Group will develop a record of communications to be maintained by the APWL Coordinator that will include contact information for internal and external stakeholders identified, type of communication, and date and summary of information conveyed. The APWL Coordinator will compile and update the Communications Plan as necessary. In addition, the APWL Coordinator and Work Group will meet annually or as often as necessary with the Chief Engineer to evaluate the effectiveness of the Communications Plan and adjust the plan as needed.

Goals of the Communications Plan

- Identify internal and external stakeholders and keep them engaged and informed.
- Create an efficient and consistent message to stakeholders.
- Provide internal stakeholders with a core communications plan to reduce duplicative efforts.

Objectives of the Work Group

Objectives (pre-listing):

- Communicate to state and local elected officials (may include mayors, county judges, and legislators). The APWL Coordinator will contact offices to determine interest.
- Identify large contributors that may be able to collaborate on solutions. The APWL Coordinator will contact the large facilities.
- Identify local programs.
- Identify smaller contributors (i.e. industrial facilities) that may be impacted by listing.

Objectives (proposal to listing):

- Identify audience - internal stakeholders, local programs, and interested external entities (provide information about subscribing to the APWL email group).
- Keep stakeholders engaged and informed.
- Update the APWL website with all available information.
- Ensure all internal experts are identified and information is distributed.

Objectives (delisting):

- Identify audience - internal stakeholders, local programs, and interested external entities (update email group, if necessary).
- Determine if a press release or public meeting is warranted.

- Establish public comment period opening/closing (coordinate with the IGR on legislative contacts, as outlined in the APWL protocol).

Examples of Tools for Meeting Objectives in the Communications Plan

The APWL Communications Plan will need to consider the available communication tools (written, spoken, and electronic) to help achieve the stated objectives. The combination of tools selected for the Communications Plan will depend on the technical knowledge of the stakeholders and the purpose of the communication. The APWL Coordinator will outline the tools, intended audience, and purpose of planned communications in the Communications Plan. Communication tools may include but are not limited to:

- Periodic print publications
  - Natural Outlook
  - Briefing documents
- Online communications
  - APWL website and email group
- Media relations and public relations materials
  - Who are the media stakeholders in the APWL area and are they interested in air quality issues? (ensure that all communications are coordinated with Agency Communications)
  - Is there public interest?
  - Will a public meeting be necessary? (coordinate activities with the OCC)
- Legal and legislative documents
  - Supplemental Environmental Projects for enforcement actions
  - Contacts with legislative officials during changes to the APWL and legislative briefing documents (coordinate with the IGR)
- Incoming communications
  - Determine how public comments on the APWL are addressed (i.e., phone call, letter, and/or email) and coordinate with the TD
  - Provide point of contact, with email address and phone number
- Outreach to internal and external stakeholders through regularly-scheduled meetings
  - TCEQ network design team and section/division meetings, trade association meetings, local programs (city, county, or local interest groups), etc.
- Annual reports
  - Annual APWL report (coordinated with the TD)

Communications Plan Example:

Summary of Project to Communicate to Stakeholders:

Type of Communication and Timeline:

List of Interested Persons Contacted:

TCEQ Staff

Local Programs

Private Citizens

Community Advisory Panel/Council

Environmental Groups

Members of the News Media

Legislative and Elected Officials

Mayors, County Judges

Members of Academia and Others

Regulated Community

Trade Associations

Appendix 7

Strategic Action Plan Guidelines

Strategic Action Plan Guidelines

Overview and Purpose

A Strategic Action Plan outlines a clear, logical set of steps that the Work Group will follow to help the TCEQ achieve the overall vision of the APWL, as outlined in the APWL protocol. These guidelines for developing a Strategic Action Plan are intended to provide enough flexibility to allow the Work Group to address the unique aspects of each APWL area. The APWL Coordinator will compile, update, maintain, and distribute the Strategic Action Plan as necessary. The APWL Coordinator and Work Group will meet annually or as often as necessary with the Chief Engineer to evaluate the effectiveness of the Strategic Action Plan and adjust the plan as needed.

The sections to be included in each Strategic Action Plan include:

- Background
- Work Group Participants and Functional Roles
- Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis
- Deadlines for Strategic Action Plan Draft and Review Procedure
- Potential Options and the Final Recommendation for an Approach
- Goals and Objectives
- Action Plan
- Evaluation Plan

Guidelines for Developing the Sections of the Strategic Action Plan

Background

The brief background section will identify the pollutant(s) of concern and potential contributing sources and/or industrial processes and will largely be based on the information provided in the boundary document(s) created by the Work Group. The specific issues that need to be addressed from the available information will be outlined in a succinct problem statement or series of statements.

Work Group Participants and Functional Roles

Prior to the first Work Group meeting to develop the Strategic Action Plan, the APWL Coordinator will determine if additional Work Group members are needed for the development of the Strategic Action Plan. The participants in this planning phase may be different than the Work Group participants in the investigation and boundary delineation phase. Work Group participants will evaluate their functional roles as defined in the APWL protocol prior to the first Strategic Action Plan meeting. If functional roles need to be redefined due to the specifics in the area of concern, the Work Group participants need to provide the APWL Coordinator with new roles that have been approved by their appropriate level of management by the second meeting.

Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

The Work Group will first conduct a SWOT analysis to help the group identify opportunities (i.e., assets and resources) and limitations (i.e., needs and constraints) of the current processes in their own program areas, including changing budget requirements, changing division priorities, technology needs, policy factors (will a rule change be necessary?), staff/time constraints, and how decisions would affect public opinion. Building on the information from these analyses, the Work Group will develop a set of possible solution strategies for the problem statement(s) identified. An additional SWOT analysis may also be conducted on the potential strategies.

Deadlines for Strategic Action Plan Draft and Review Procedure

Based on the information regarding the pollutant(s) of concern and potential contributing sources identified in the boundary documents provided by the Work Group, the APWL Coordinator will develop an initial set of deadlines for the creation of the Strategic Action Plan document. The first and possibly second planning meetings will focus on brainstorming potential strategies for addressing elevated ambient concentrations of the pollutant(s) of concern in the APWL area. To expedite the analysis of potential solution strategies, Work Group participants will need to determine the appropriate level of management review by the first or second planning meeting. The Chief Engineer will ultimately have the authority to make final decisions regarding all APWL areas and activities. The APWL Coordinator will be the liaison between the Work Group, the Chief Engineer, and other internal and external stakeholders. The APWL Coordinator will compile the information provided by the Work Group participants and will provide the Work Group with a draft Strategic Action Plan outlining potential strategies considered and the final recommendation. Though this will vary depending on the complexity of issues and availability of data in the area of concern, it is anticipated that the first draft of the Strategic Action Plan would be ready for review by the appropriate Division Directors within two to three months to ensure appropriate allocation of resources. The draft will be ready for review by the Chief Engineer in three to four months.

Potential Options and the Final Recommendation for an Approach

The SWOT analyses and factors considered will be documented in the Strategic Action Plan and will help provide the rationale for the determination of the final recommendation to the Chief Engineer. The draft of these analyses and recommendation(s) may be presented to the Chief Engineer at this stage, prior to further development of the strategy.

Goals and Objectives

The Work Group will determine specific action steps that must be achieved to reach the project goals. For example, if the goal identified from the final recommendation is to conduct additional monitoring for benzene, objectives may include identification of resources (i.e., equipment and employees), determination of a sampling strategy (i.e., sampling times and locations), etc.

Action Plan

The format of the action plan may vary, depending on the specific objectives identified by the Work Group, but may be as simple as the example provided in Table 1, *Strategic Action Plan Example*. The action plan is intended to divide the objectives into small, measurable action items to be delegated to Work Group participants based on their functional roles. The APWL Coordinator and Work Group will determine reasonable timelines for action items identified and the frequency of reviews of the implementation of the action items. The APWL Coordinator will document all action items in the Strategic Action Plan document and will distribute the document as necessary to internal and external stakeholders.

Table 1: Strategic Action Plan Example

Goal #1:	
Objectives:	
Tasks/Activities:	
Timeline:	
Lead Role:	
Strategies Used:	
Measure/Document:	
Resources Needed:	

Evaluation Plan

Once the Strategic Action Plan is implemented, the APWL Coordinator and Work Group will meet annually or as often as necessary with the Chief Engineer to evaluate the effectiveness of the plan and make adjustments as needed.